

WHAT IS CLAIMED IS

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1. A nonvolatile semiconductor memory device, comprising:

a plurality of blocks each having a nonvolatile memory cell array; and

10 a program potential generating circuit which supplies a program potential to the nonvolatile memory cell array, wherein said program potential generating circuit adjusts the program potential according to a first address signal  
15 selecting one of said blocks and a second address signal indicating a position of a write-accessed memory cell in said one of said blocks.

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2. The nonvolatile semiconductor memory device as claimed in claim 1, wherein said program potential generating circuit includes:

25 a booster circuit which generates a boosted potential; and

a regulator circuit which generates the program potential according to the boosted potential and a reference potential, wherein the program  
30 potential generated by said regulator circuit is adjusted according to the first address signal and the second address signal.

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3. The nonvolatile semiconductor memory

device as claimed in claim 2, wherein said regulator circuit includes:

5 a capacitance circuit which generates a comparison potential by dividing the program potential by use of capacitances;

10 a differential amplifier circuit which generates the program potential from the boosted potential in response to a comparison between the comparison potential and the reference potential; and

15 a circuit which adjusts the capacitances of said capacitance circuit according to the first address signal and the second address signal.

4. The nonvolatile semiconductor memory device as claimed in claim 1, further comprising a  
20 program potential adjusting circuit which generates a program potential adjusting signal according to the first address signal and the second address signal, wherein said program potential generating circuit adjusts the program potential according to  
25 the program potential adjusting signal.

30 5. The nonvolatile semiconductor memory device as claimed in claim 4, wherein said program potential adjusting circuit performs inversion control that either inverts or does not invert the second address signal, depending on the first  
35 address signal, and supplies the second address signal having undergone the inversion control to said program potential generating circuit as the

program potential adjusting signal.

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6. The nonvolatile semiconductor memory device as claimed in claim 1, wherein two of said blocks have different arrangements of a second address represented by the second address signal  
10 such that the second address is arranged in reversed orders between the two blocks in relation to distance from said program potential generating circuit, the program potential being adjusted according to the second address signal after  
15 identifying one of the two blocks according to the first address signal, such as to reflect a physical distance from said program potential generating circuit to the position of the write-accessed memory cell.

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7. The nonvolatile semiconductor memory device as claimed in claim 1, wherein two of said blocks are positioned at different distances from said program potential generating circuit, the program potential being adjusted according to the second address signal after identifying one of the  
25 two blocks according to the first address signal, such as to reflect a physical distance from said program potential generating circuit to the position of the write-accessed memory cell.

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